```
FILE 'CAPLUS, BIOSIS' ENTERED AT 08:14:08 ON 10 JUL 2008
          42054 HCV
L2
          33287 POLYNUCLEOTIDE
L3
          92644 FUSION (W) PROTEIN
L4
            98 L1 AND L2
L5
            575 L3 AND L1
L6
          10567 CORE (S) ANTIGEN
L7
          5174 NS3
L8
          1128 NS4
L9
          1797 NS5
L10
           376 L6 AND L7
L11
           186 L10 AND L8
L12
           134 L11 AND L9
L13
             1 L12 AND L4
L14
             1 L13 AND L4
           340 "HCV-1"
L15
    FILE 'CAPLUS' ENTERED AT 08:29:38 ON 10 JUL 2008
L16
           156 HCV-1
L17
              3 NS3 FULL LENGTH
L18
             0 L16 AND L17
L19
           638 HCV NS3
L20
             35 L19 AND NS4
L21
            20 L20 AND NS5
L22
             12 L21 AND CORE
L23
           141 L5 AND NS3
L24
            37 L23 AND NS4
L25
             0 N24 AND NS5
L26
             21 L24 AND NS5
L27
             17 L26 AND CORE
L28
         23524 SAPONIN
L29
           1083 L28 AND CHOLESTEROL
L30
             0 L29 AND L23
L31
             0 L29 AND L5
L32
           638 HCV NS3
L33
            30 HCV NS4
            48 HCV NS5
L34
L35
          1161 HCV CORE
L36
           156 HCV-1
L37
             7 L32 AND L36
             0 L33 AND L36
L38
L39
             1 L34 AND L36
L40
             14 L35 AND L36
L41
             0 L29 AND L32
L42
             0 L29 AND L33
L43
             0 L29 AND L34
L44
             0 L29 AND L35
=> L7 and L8
L45
          393 L7 AND L8
=> L45 and L9
          236 L45 AND L9
L46
=> different genotype
       2622876 DIFFERENT
           105 DIFFERENTS
       2622953 DIFFERENT
                 (DIFFERENT OR DIFFERENTS)
        62107 GENOTYPE
        87714 GENOTYPES
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109922 GENOTYPE
                 (GENOTYPE OR GENOTYPES)
1.47
         2799 DIFFERENT GENOTYPE
                 (DIFFERENT(W)GENOTYPE)
=> L47 and L46
L48
           2 L47 AND L46
=> peptide (p) antigen
        397589 PEPTIDE
        289691 PEPTIDES
        507390 PEPTIDE
                 (PEPTIDE OR PEPTIDES)
        340067 ANTIGEN
        267160 ANTIGENS
        428672 ANTIGEN
                 (ANTIGEN OR ANTIGENS)
        36469 PEPTIDE (P) ANTIGEN
L49
=> L49 and L46
T-50
           30 L49 AND L46
=> L47 and L50
             1 L47 AND L50
T.51
=> D L48 IBIB ABS 1-2
L48 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:
                        2005:984887 CAPLUS
DOCUMENT NUMBER:
                         143:384632
TITLE:
                         Design of novel conformational and genotype-specific
                         antigens for improving sensitivity of immunoassays for
                         hepatitis C virus-specific antibodies
                         Lin, Sansan; Arcangel, Phillip; Medina-Selby,
AUTHOR(S):
                         Angelica; Coit, Doris; Ng, Philip; Nguyen, Steve;
                         McCoin, Colin; Gyenes, Alex; Hu, Celine; Tandeske,
                         Laura; Phelps, Bruce; Chien, David
CORPORATE SOURCE:
                         Chiron Corporation, Emeryville, CA, 94608, USA
SOURCE:
                         Journal of Clinical Microbiology (2005), 43(8),
                         3917-3924
                        CODEN: JCMIDW; ISSN: 0095-1137
PUBLISHER .
                        American Society for Microbiology
DOCUMENT TYPE:
                        Journal
LANGUAGE:
                         English
AB
    The current com. licensed enzyme-linked immunosorbent assays (ELISAs) for
     hepatitis C virus (HCV) mainly use recombinant proteins containing linear
     epitopes. There is evidence, however, that conformational epitopes of HCV
     are more immunoreactive. Thus, we have designed an HCV antibody assay
     that employs a conformational protein, NS3NS4a PI (with functional
     protease and helicase activities), and a linear fusion protein,
    multiple-epitope fusion antigen 7.1 (MEFA 7.1) or MEFA 7.2. We have shown
    that NS3NS4a PI detects early-seroconversion conformation-sensitive
     antibodies better than c33c antigen. The correct conformation of NS3NS4a
    PI also cross-reacts with different genotype samples better than the c33c antigen. MEFA 7.1 and MEFA 7.2 incorporate all the
     major immunodominant and genotype-specific epitopes of HCV core, E1, E2
     hypervariable region 1 (HVR1), E2 HVR1-plus-HVR2 consensus, NS3,
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NS4, and NS5. Since MEFA 7.1 is degraded by the active

NS3NS4a PI protease, we designed a second MEFA 7.2 construct in which the six protease cleavage sites found in MEFA 7.1 were eliminated by amino acid mutation. We demonstrate here that MEFA 7.2 remains intact in the

presence of NS3NS4a PI and preserves the epitopes present in MEFA 7.1. Compared to currently licensed assays, an ELISA incorporating a combination of the two antigens NS3NS4a PI and MEFA 7.1 or 7.2 demonstrates better serotype sensitivity and detects seroconversion earlier in many com. available panels. We believe that an assay using NS3NS4a PI and MEFA 7.1 or 7.2 may have the potential to replace current HCV immunoassays for better sensitivity.

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L48 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:298250 CAPLUS

DOCUMENT NUMBER: 131:127333

TITLE:

Use of a novel hepatitis C virus (HCV) major-epitope chimeric polypeptide for diagnosis of HCV infection AUTHOR(S): Chien, David Y.; Arcangel, Phillip; Medina-Selby, Angelica; Coit, Doris; Baumeister, Mark; Nguyen, Steve; George-Nascimento, Carlos; Gyenes, Alexander;

Kuo, George; Valenzuela, Pablo CORPORATE SOURCE: Chiron Corporation, Emeryville, CA, 94507, USA

Journal of Clinical Microbiology (1999), 37(5), SOURCE: 1393-1397

CODEN: JCMIDW; ISSN: 0095-1137 PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English The genome of hepatitis C virus (HCV) consists of seven functional

regions: the core, E1, E2/NS1, NS2, NS3, NS4, and NS5 regions. The U.S. Food and Drug Administration-licensed 2.0G immunoassay for the detection of anti-HCV uses proteins from the core, NS3, and NS4 regions. The 3.0G ELISA includes the protein from the NS5 region. The necessity of detecting antibodies to viral envelope proteins (E1 and E2) and to different genotype samples has been demonstrated previously. In this study we have attempted to improve the sensitivity of the anti-HCV assay by developing a single multiple-epitope fusion antigen (MEFA; MEFA-6) which incorporates all of the major immunodominant epitopes from the seven

functional regions of the HCV genome. A nucleic acid sequence consisting of proteins from the viral core, E1, E2, NS3, NS4, and

NS5 regions and different subtype-specific regions of the NS4 region was constructed, cloned, and expressed in yeast. The epitopes present on this antigen can be detected by epitope-specific monoclonal and polyclonal antibodies. In a competition assay, the MEFA-6 protein competed with 83 to 96% of genotype-specific antibodies from HCV genotype-specific peptides. This recombinant antigen was subsequently used to design an anti-HCV chemiluminescent immunoassay. We designed our assav using a monoclonal anti-human IgG antibody bound to the solid phase. Because MEFA-6 is fused with human superoxide dismutase (h-SOD), we used an anti-human superoxide dismutase, di-Me acridinium ester-labeled

monoclonal antibody for detection. Our results indicate that MEFA-6 exposes all of the major immunogenic epitopes. Its excellent sensitivity and specificity for the detection of clin. seroconversion are demonstrated by this assay.

17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L50 IBIB ABS 1-30

L50 ANSWER 1 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:449448 CAPLUS

DOCUMENT NUMBER: 143:6261

TITLE: New immunogenic peptides derived for nonstructural protein NS3 of hepatitis C virus for use in

treatment and prevention of infection

INVENTOR(S): Fournillier, Anne; Inchauspe, Genevieve; Martin,

Perrine

PATENT ASSIGNEE(S): Biomerieux, Fr.

SOURCE: Fr. Demande, 124 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

LANGUAGE: Fr FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	TENT I	.00			KIN	D	DATE			APPL	ICAT	ION :	NO.		D.	ATE	
FR	2862	648			A1 B1		2005 2006			FR 2			9			0031	
	2005		20		A1		2005			WO 2	004-	FR50	581		2	0041	110
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	ΒY,	ΒZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
		GΕ,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NA,	NI,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	KΕ,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IS,	IT,	LU,	MC,	NL,	PL,	PT,	RO,
		SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,
		NE,	SN,	TD,	TG												

PRIORITY APPLN. INFO.: FR 2003-13649 A 20031121

AB New antigenic peptides of the nonstructural protein NS3 of hepatitis C virus are identified in the 86-amino acid fragment 1096-1181 of the viral polyprotein. These include 6 new epitopes recognized by HLA-B7-restricted T cells. These epitopes may be used in combination with epitopes from the non-structural proteins NS4 and NS5b in

vaccines against the virus (no data.).

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 2 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:880822 CAPLUS

DOCUMENT NUMBER: 142:154107

TITLE: High resolution analysis of cellular immune responses in resolved and persistent hepatitis C virus infection AUTHOR(S): Lauer, Georg M.; Barnes, Eleanor; Lucas, Michaela;

Timm, Joerg; Ouchi, Kei; Kim, Arthur Y.; Day, Cheryl L.; Robbins, Gregory K.; Casson, Deborah R.; Reiser, Markus; Dusheiko, Geoffrey; Allen, Todd M.; Chung, Raymond T.; Walker, Bruce D.; Klenerman, Paul

CORPORATE SOURCE: Partners AIDS Research Center, Massachusetts General Hospital and Harvard Medical School, Boston, MA, USA

SOURCE: Gastroenterology (2004), 127(3), 924-936

CODEN: GASTAB: ISSN: 0016-5085

CODEN: GASTAB; ISSN: 0016-5 PUBLISHER: Elsevier Inc.

PUBLISHER: Elsevier In DOCUMENT TYPE: Journal LANGUAGE: English

AB Background & Aims: Cellular immune responses are thought to play a key role in the resolution of primary HCV infection. Although it has been consistently shown that CD4+ T-cell responses are maintained in those with spontaneous resolution but lost in those with persistent infection, the role

of CD8+ T-cell responses remains controversial. Previous studies have largely focused on limited HLA alleles and predefined CD8+ T-cell epitopes, and, thus, comprehensive studies remain to be performed. Methods: To understand the composition of the immune response associated with spontaneous resolution, the authors comprehensively mapped CD8+ T-cell responses in 20 HLA-diverse persons with resolved HCV infection, using HCV peptides spanning the entire genome. The authors analyzed the magnitude, breadth, function, and phenotype using ELISpot, class-I tetramers, intracellular cytokine staining, and cytolytic assays. The authors studied in parallel HCV-specific responses and viral sequence variation in persistent infection. Results: Responses in individuals with resolved infection were strong and broad with robust proliferation in response to antigen. Responses in those persistently infected were rarely detected ex vivo and, when present, were narrowly directed and weak. However, they also proliferated in vitro. Dominant target epitopes differed among individuals in both cohorts, despite frequently shared HLA-alleles. Conclusions: These data indicate that persisting, strong CD8+ T-cell responses are observed in the majority of persons with resolved HCV infection and provide support for strategies to boost CD8+ T-cell responses for the prevention or treatment of HCV infection but also highlight the diversity of responses that may need to be elicited to provide protection. REFERENCE COUNT:

L50 ANSWER 3 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:161546 CAPLUS

DOCUMENT NUMBER: 140:269143

TITLE: Peptide-Protein Microarrays for the Simultaneous

Detection of Pathogen Infections

AUTHOR(S): Duburcq, Xavier; Olivier, Christophe; Malingue, Frederic; Desmet, Remi; Bouzidi, Ahmed; Zhou,

Frederic; Desmet, Remi; Bouzidi, Ahmed; Zhou, Fenhling; Auriault, Claude; Gras-Masse, Helene; Melnyk, Oleg

THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

CORPORATE SOURCE: UMR CNRS 8527, Biological Institute of Lille, Lille,

59021, Fr.

SOURCE: Bioconjugate Chemistry (2004), 15(2), 307-316

CODEN: BCCHES; ISSN: 1043-1802

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The authors describe novel peptide-protein microarrays, which were fabricated using semicarbazide glass slides that permitted the immobilization of glyoxylyl peptides by site-specific ligation and the immobilization of proteins by physisorption. The arrays permitted the simultaneous serodetection of antibodies directed against hepatitis C virus (HCV core p21 15-45 peptide, NS4 1925-1947 peptide, core, NS3, NS4, and mixture of core,

NS3, NS4, and NS5 antigens),

hepatitis B virus (HBc, HBe, and HBs), human immunodeficiency virus (Gp41 and Gp120 for HIV-I and Gp36 for HIV-II), Epstein-Barr virus (VCAp18

153-176 peptide), and syphilis (rTpN47 and rTpN17) antigens using an immunofluorescence assay. Peptide

protein microarrays displayed high signal-to-noise ratios, sensitivities, and specificities for the detection of antibodies as revealed by the anal. of a collection of human sera referenced against these five pathogens.

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 4 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2003:168544 CAPLUS

DOCUMENT NUMBER: 138:220351

Identification and preparation of peptides as epitopes TITLE: recognized by hepatitis C virus-specific cytotoxic T

cell and vaccine against hepatitis C virus (HCV) INVENTOR(S): Funatsuki, Kiyomi; Ishiko, Hiroaki; Ikai, Michio PATENT ASSIGNEE(S): Mitsubishi Chemical Bio-Clinical Laboratories Inc.,

Japan Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE JP 2003064096 A 2002020F ______ 20030305 JP 2001-259358 20010829 20010829 PRIORITY APPLN. INFO.: JP 2001-259358

AB Eight peptides including H-Phe-Thr-Gly-Asp-Phe-Asp-Ser-Val-OH (I), H-Gly-Phe-Thr-Gly-Asp-Phe-Asp-Ser-Val-OH (II), H-Phe-Thr-Gly-Asp-Phe-Asp-Ser-Val-Ile-OH (III), H-Glv-Lvs-Tvr-Leu-Phe-Asn-Trp-Ala-Val-Lvs-Thr-Lys-Leu-Lys-Leu-OH (IV), H-Arg-Pro -Arg-Trp-Phe-Met-Leu-Cys-Leu-OH (V), H-Thr-Asp-Ala-Leu-Met-Thr-Glv-Phe-Thr-Glv-Asp-Phe-Asp-Ser-Val-Ile-Asp-Cvs-Asn-Thr-OH (VI), H-His-Ser-Leu-Ser-Arg-Ala-Arg-Pro-Arg-Trp-Phe-Met-Leu-Cys-Leu-OH (VII), and H-Ala-Arg-Pro-Arg-Trp-Phe-Met-Leu-Cys-Leu-Leu-Leu-Leu-Leu-Ser-Val-OH (VIII) are disclosed, which are epitopes recognized by hepatitis C virus-specific cytotoxic T cell (CTL) and represented in human leukemia antigen (HLA) class I mol. on the surface of infected cells. Also claimed are a vaccine containing at least one peptide selected from the peptides I, II, III, and VI or at least one peptide selected from IV, V, VII, and VIII as the active ingredients or a vaccine containing at least one DNA selected from DNAs coding the peptides I, II, III, and VI or at least one DNAs coding the peptides IV, V, VII, and VIII as the active ingredients. Above vaccines induce HCV-specific CTL, can completely remove HCV-infected cells by activating the CTL response in patients having HLA-A*0206 and HLA-B*5603, and are useful for prophylaxis or treatment of HCV-infected patients. Thus, cDNA of each HCV gene domain (core, E1, E2, NS2, NS3, NS4, and Ns5) was integrated in pAK10 plasmid which underwent homologous recombination with vaccinia virus (VAC) to produce rVAC. Peripheral blood mononucleosis (PBMC) was separated from peripheral blood sampled from a patient who recovered from acute hepatitis .apprx.11 mo earlier. CD8+ memory T cells were separated from PBMC using magnetic beads and incubated for 2 wk with healthy patient's PBMC treated with interleukin-2 (rIL-2), anti-CD3 antibody, and X-ray irradiation while adding rIL-2 every week to prepare effector cells. PBMC prepared above were infected with EB virus to establish B cell (B-LCL) which were infected with rVAC for 16-18 h to prepare target cells. HCV-specific CTL were isolated by measuring the clastogenicity of effector cells against target cells in a 51Cr release assay and cloned. The isolated cloned cells were examined to show the constraint on HLA-A*0206 in an assay using B-LCL and the clastogenicity against B-LCL treated with the peptide VI which was one of 68 20-amino acid peptides related to NS3 domain (preparation not given). Six peptides having 8 or 9 amino acids synthesized (preparation not given) based on the sequence of VI

were examined for the clastogenicity against B-LCL. The peptide I was identified as an epitope recognized by HCV-specific CTL.

L50 ANSWER 5 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:908392 CAPLUS

DOCUMENT NUMBER: 138:13314 TITLE: Comparative vaccine studies in HLA-A2.1-transgenic mice reveal a clustered organization of epitopes

presented in hepatitis C virus natural infection Himoudi, Nourredine; Abraham, Jean-Daniel; AUTHOR(S):

Fournillier, Anne; Lone, Yu Chun; Joubert, Aurelie; Op De Beeck, Anne; Freida, Delphinc; Lemonnier, Francois;

Kieny, Marie Paule; Inchauspe, Genevieve

Unite Mixte CNRS-BioMerieux, UMR 2142, Ecole Normale

Superieure, Lvon, 69364, Fr.

SOURCE:

Journal of Virology (2002), 76(24), 12735-12746

CODEN: JOVIAM: ISSN: 0022-538X PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

A polyepitopic CD8+-T-cell response is thought to be critical for control of hepatitis C virus (HCV) infection. Using transgenic mice, we analyzed the immunogenicity and dominance of most known HLA-A2.1 epitopes presented during infection by using vaccines that carry the potential to enter clin. trials: peptides, DNA, and recombinant adenoviruses. The vaccines capacity to induce specific cytotoxic T lymphocytes and interferon gamma-producing cells revealed that immunogenic epitopes are clustered in specific antigens. For two key antigens,

flanking regions were shown to greatly enhance the scope of epitope recognition, whereas a DNA-adenovirus prime-boost vaccination strategy augmented epitope immunogenicity, even that of subdominant ones. The present study reveals a clustered organization of HCV immunogenic HLA.A2.1

epitopes and strategies to modulate their dominance. REFERENCE COUNT: THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS 51 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 6 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:907206 CAPLUS

DOCUMENT NUMBER: 138:3667

TITLE: HLA class I binding peptides and their uses Sette, Alessandro; Sidney, John; Southwood, Scott

INVENTOR(S): PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 14 pp., Cont.-in-part of U.S.

Ser. No. 590,298, abandoned.

CODEN: USXXCO

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT: 34

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 20020177694 US 20070055049 PRIORITY APPLN. INFO.:	A1 A1	20021128 20070308	US 1998-17743 US 2004-817970 US 1996-590298 US 1992-926666 US 1993-27146 US 1993-27746 US 1993-173205 US 1993-103396 US 1993-121101 US 1993-159184 US 1993-159189 US 1994-1666 US 1994-205713 US 1994-278634 US 1994-278634	B2 B2 B2 B2 B2 B2 A2 A2 B2 B2	19980203 20040406 19960123 19920807 19930305 19930305 19930604 19930806 19930914 19931129 19941125 19940304 19940721 19940914

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US 1994-344824
                  B2 19941123
US 1994-347610
                  B2 19941201
US 1994-349177
                 B2 19941202
US 1995-451913
                 B2 19950526
US 1995-454033
                 B2 19950526
US 1995-452843
                 B2 19950530
                 B2 19950607
US 1995-485218
US 1996-589107
                 B2 19960123
US 1996-589108
                 B2 19960123
US 1996-13833P
                 P 19960321
US 1996-13980P
                 P 19960321
US 1996-753615
                 B2 19961127
US 1996-753622
                 B2 19961127
IIS 1996-758409
                 B2 19961127
US 1997-815396
                 B2 19970310
US 1997-821739
                 B2 19970320
US 1997-822382
                 B2 19970320
                  B2 19980203
US 1998-17524
US 1998-17735
                  B2 19980203
US 1998-17743
                  B2 19980203
US 1998-98584
                  B2 19980617
                  A2 19981110
US 1998-189702
US 1999-226775
                  B2 19990106
US 1999-260714
                  B2 19990301
US 1999-141422P
                  P 19990629
                  B2 19990630
US 1999-346105
US 2000-665510
                  B2 20000919
US 2000-242350P
                  P
                     20001019
US 2001-264969P
                 P 20010129
US 2001-285624P
                  P 20010420
                 B2 20010822
US 2001-935476
US 2002-121415
                  A2 20020411
US 2002-30014
                 B2 20020724
US 2002-416207P
                 P 20021003
US 2002-417269P
                 P 20021008
US 2003-470364
                  A2 20030725
WO 2003-US31308
                  A2 20031003
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AB The present invention provides peptide compns. capable of binding glycoproteins encoded by HLA-A, HLA-B, and HLA-C alleles and inducing T cell activation in T cells restricted by the HLA allele. The peptides are useful to elicit an immune response against a desired antigen. More specifically, the peptides are derived from proteins from hepatitis B virus, hepatitis C virus, HIV, Plasmodium falciparum, and tumor antigens, and contain HLA-B7-like supermotifs. The peptides can be used in therapeutic and diagnostic applications.

L50 ANSWER 7 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:869425 CAPLUS

DOCUMENT NUMBER:

137:368568

TITLE: HLA-A-binding peptides and their uses in vaccines and

disease diagnosis INVENTOR(S):

Kubo, Ralph T.; Grev, Howard M.; Sette, Alessandro; Celis, Esteban

PATENT ASSIGNEE (S):

SOURCE: U.S. Pat. Appl. Publ., 15 pp., Cont.-in-part of U.S.

6,037,135. CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: 34

PATENT INFORMATION:				
PATENT NO.		KIND DATE	APPLICATION NO.	
US 20020168374 EP 1704868 R: AT, BE, US 6037135 CA 2248659 WO 9734617 W: AL, AM, DK, EE, LK, LR, RO, RU, RW: GH, KE	CH, AT, ES, LS, SD, LS,	A1 20021114 A1 20060927 DE, DK, ES, FR, A 20000314 A1 19970925 A1 19970925 AU, AZ, BA, BB, FI, GB, GE, HU, LT, LU, LV, MD, SE, SG, SI, SK, MW, SD, SZ, UG,	US 1997-821739 EP 2006-10437 GB, GR, IT, LI, LU, US 1993-159339 CA 1997-2248659	19970320 19930806 NL, SE, MC, PT, IE 19931129 19970321 CN, CU, CZ, DE, KP, KR, KZ, LC, NO, NZ, PL, PT, UG, UZ, VN, YU ES, FI, FR, GB,
ML, MR,	NE,	SN, TD, TG A 19971010 B2 20001012		19970321
AU 725550 EP 888120 R: AT, BE, IE, FI		A1 19990107	EP 1997-916104 GB, GR, IT, LI, LU,	
CN 1218404 BR 9708217	.:	A 19990602 A 19990707 T 20020528 A1 20070308 A 20060629	CN 1997-19454 BR 1997-8217 JP 1997-533690 US 2004-817970 JP 2005-364399 US 1992-926666 US 1993-27746 US 1993-27746 US 1993-2793-2793 US 1996-13833P US 1996-13833P US 1993-37205 EP 1993-37205 EP 1993-37216 US 1993-37216 US 1993-37216 US 1993-37216 US 1993-37216 US 1994-505592 US 1993-121101 US 1994-505592 US 1993-121101 US 1994-296731 US 1994-296731 US 1994-349717 US 1995-454033 US 1995-454033 US 1995-454033 US 1995-459107 US 1996-589107 US 1996-589107 US 1996-589108 US 1996-589108 US 1996-590298 US 1996-590298 US 1996-590298 US 1996-753622 US 1996-753622 US 1996-753629 US 1996-7582282 US 1996-7582396 US 1997-812399 US 1997-7821739 US 1999-77524	B2 19940125 B2 19940721 A2 19940721 A2 19940721 A2 19940714 B2 19941123 B2 19941201 B2 19941202 B2 19950526 B2 19950526 B2 19950526 B2 19950607 B2 19960123 B2 19960123 B2 19960123 B2 19961127 B2 19961127 B2 19961127 B2 19961127 B2 19961127 B2 19961127 B2 19961127 B2 19961127 B2 19961127

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US 1998-17735 B2 19980203
US 1998-17743
                         B2 19980203
US 1998-98584 B2 19980617
US 1998-189702 A2 19981110
US 1999-226775 B2 19990106
US 1999-260714 B2 19990301
US 1999-141422P P 19990629
US 1999-346105 B2 19990630
US 2000-665510 B2 2000919
US 2000-242350P P 2001019
US 2001-264969P P 20010129
US 2001-285624P
                         P 20010420
US 2001-935476
                         B2 20010822
US 2002-121415
                         A2 20020411
US 2002-30014
                         B2 20020724
US 2002-416207P
                         P 20021003
US 2002-417269P
                         P 20021008
US 2003-470364
                         A2 20030725
WO 2003-US31308
                          A2 20031003
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AB The present invention provides peptide compns. capable of specifically binding selected HLA alleles and inducing T cell activation in T cells restricted by the HLA allele. The peptides are useful to elicit an immune response against a desired antigen. Specifically, the HLA alleles are HLA-A alleles, which induce a cytotoxic T cell response, and the peptides are from viral or bacterial antigens, cancer antigens, or autoantigens. The peptides can be used for preventing, treating, or diagnosing various diseases, including viral infection and cancer.

L50 ANSWER 8 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:814667 CAPLUS

DOCUMENT NUMBER: 137:324217

TITLE: Recombinant adenovirus expressing multiple mutant HIV antigens and immunostimulatory cytokine for use as

genetic vaccine against human immunodeficiency virus infection

INVENTOR(S): Wang, Danher

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 156 pp., Cont.-in-part of Appl.

No. PCT/US01/18238. CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO	. DATE
US 20020155127	A1 2002	1024 US 2001-3035	20011101
US 6544780	B1 2003	0408 US 2000-585599	20000602
WO 2001091536	A2 2001	1206 WO 2001-US1823	8 20010604
WO 2001091536	A3 2002	0808	
W: AE, AG, AL,	AM, AT, AU,	AZ, BA, BB, BG, BR, B	Y, BZ, CA, CH, CN,
CO, CR, CU,	CZ, DE, DK,	DM, DZ, EC, EE, ES, F	I, GB, GD, GE, GH,
GM, HR, HU,	ID, IL, IN,	IS, JP, KE, KG, KP, K	R, KZ, LC, LK, LR,
LS, LT, LU,	LV, MA, MD,	MG, MK, MN, MW, MX, M	Z, NO, NZ, PL, PT,
RO, RU, SD,	SE, SG, SI,	SK, SL, TJ, TM, TR, T	T, TZ, UA, UG, US,
UZ, VN, YU,	ZA, ZW		
RW: GH, GM, KE,	LS, MW, MZ,	SD, SL, SZ, TZ, UG, Z	W, AT, BE, CH, CY,
DE, DK, ES,	FI, FR, GB,	GR, IE, IT, LU, MC, N	L, PT, SE, TR, BF,
BJ, CF, CG,	CI, CM, GA,	GN, GW, ML, MR, NE, S	N, TD, TG

		2003						2003			US	2002	-2809	15		2	0021	024
1	US	2004	0265	336		A9		2004										
	CA	2465	037			A1		2003	0508		CA	2002	-2465	037		2	0021	101
1	WO	2003	0380	57		A2		2003	0508		WO	2002	-US35	112		2	0021	101
1	WO	2003	0380	57		A3		2003	0717									
		W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BE	BG, BG	, BR,	BY,	BZ,	CA,	CH,	CN,
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC	, EE	, ES,	FI,	GB,	GD,	GE,	GH,
			GM.	HR.	HU.	ID.	IL.	IN.	IS.	JP.	KE	. KG	, KP,	KR.	KZ.	LC.	LK.	LR.
			LS.	LT.	LU.	LV.	MA,	MD,	MG,	MK,	M	J. MW	, MX,	MZ,	NO.	NZ,	OM,	PH,
			PL.	PT.	RO.	RII.	SD.	SE.	SG.	SI.	SE	C SL	, TJ,	TM.	TN.	TR.	TT.	TZ.
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		RW:											, UG,	ZM,	ZW,	AM,	AZ,	BY,
			KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BO	G, CH	, CY,	CZ,	DE,	DK,	EE,	ES,
			FI,	FR.	GB,	GR,	IE,	IT,	LU,	MC,	NI	, PT	, SE,	SK,	TR,	BF,	ВJ,	CF,
			CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MF	R, NE	, SN,	TD,	TG			
	ΑU	2002											-3481			2	0021	101
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1	US	2004	0185	064		A9		2004	0923									
1	EP	1451	329			A2		2004	0901		EP	2002	-7843	74		2	0021	101
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			IE.	SI.	LT.	LV.	FI.	RO.	MK.	CY.	AI	. TR	, BG,	CZ.	EE.	SK		
	CN	1636	063			A		2005	0706		CN	2002	-8266	11		2	0021	101
	JP	1636 2005	5250	85		T		2005	0825		JP	2003	-5403	22		2	0021	101
	IN	2004	CN01	207		A		2006	0210		IN	2004	-CN12	07		2	0040	601
	ZA	2004	0034	34		A		2006	0531		ZA	2004	-3434			2	0060	322
		2007											-2035					
PRIOR	ΙŤΣ	APP:	LN.	INFO	. :						US	2000	-5855	99		A2 2	0000	602
													-US18					
													-2712					
											2011	2001	_7129	Ω		TO 2	0010	604
											IIS	2001	-3035	-		A1 2	0011	101
											WO	2002	-US35	112		W 2	0021	101
AB I	Rec	combi	nant	ade	novi:	rus	and	meth	ods	of a			ratio					

provided for eliciting immune response of the host to human immunodeficiency virus (HIV). The recombinant adenovirus is capable of expressing multiple wild type or mutant HIV antigens such as HIV envelope proteins without the cleavage site or the cytosolic domain, structural proteins such as Gag and its proteolytic fragments in a natural, secreted or membrane-bound form, and regulatory proteins such as Tat, Rev and Nef. Immuno-stimulators such as cytokines can also be expressed by the recombinant adenovirus to further enhance the immunogenicity of the HIV antigens.

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L50 ANSWER 9 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:
                        2002:533946 CAPLUS
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137:92734

DOCUMENT NUMBER:

TITLE: Compositions comprising HLA class I epitope and class

II epitope for eliciting cytotoxic T lymphocyte immunity against infections and cancer

INVENTOR(S): Vitiello, Maria A.; Chestnut, Robert W.; Sette,

Alessandro D.; Celis, Esteban; Grey, Howard

PATENT ASSIGNEE(S): Epimmune Inc., USA

SOURCE: U.S., 85 pp., Cont.-in-part of U.S. Ser. No. 935,811, abandoned.

CODEN: USXXAM Pat.ent.

DOCUMENT TYPE: English FAMILY ACC. NUM. COUNT: 34

PATENT INFORMATION:

DATE PATENT NO. KIND DATE APPLICATION NO.

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US 6419931 B1 20020716 US 1994-197484 19940216
ZA 9206441 A 19930607 ZA 1992-6441 19920826
EP 1018344 A2 20000712 EP 2000-102538 19920826
EP 1018344 A3 20000920
                R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE
         CA 2183416 A1 19950824 CA 1995-2183416 19950216
WO 9522317 A1 19950824 WO 1995-US2121 19950216
                 W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI,
                         GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG,
                         MN, MW, MX, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT,
                         UA, UG
                 RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT,
                         LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE,
                         SN, TD, TG
         AU 9518473
                                                              19950904 AU 1995-18473
                                                                                                                                  19950216
         EP 804158
                              A1 19971105
B1 20040929
                                                                                   EP 1995-910309
                                                                                                                                 19950216
         EP 804158
                R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE
         AT 277633 T 20041015 AT 1995-910309 19950216
US 6322789 B1 20011127 US 1995-464496 19950605
                                                            20011127 US 1995-464496
20040210 US 1999-239043
19990624 AU 1999-25004
         US 6689363 B1 20040210

AU 9925004 A 19990624

AU 727738 B2 20001221

US 20030099634 A1 20030529

JP 2004075693 A 20040311

JP 3586278 B2 20041110
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                                                                                   US 2002-128711
JP 2003-391442
                                                                                                                                   20020422
                                                                                                                                   20031120
                                                                                    US 1991-749568 B2 19910826 US 1992-827682 B2 19920129 US 1992-827682 B2 19920129 US 1992-935811 B2 19920427 US 1992-935811 B2 19920826 US 1992-926666 B2 19920807 B2 19920827 US 1993-27146 B2 19930305 US 1993-27146 B2 19930305 US 1993-27146 B2 19930305 US 1993-27146 B2 19930305 US 1993-12930604 US 1993-159184 B2 19931129 US 1993-159184 B2 19931129 US 1994-159184 B2 19931129 US 1994-179184 B2 19931129 US 1994-34824 B2 19941123 US 1994-34824 B2 19941123 US 1994-344824 B2 19941123 US 1994-344824 B2 19941123 US 1994-344824 B2 19941123 US 1994-344814 B2 19940721 US 1994-344814 B2 19940721 US 1994-344814 B2 19940721 US 1994-341610 A2 1994123 US 1995-461603 A1 19950216 US 1995-461603 A1 19950215 US 1997-820360 A2 19970312
PRIORITY APPLN. INFO.:
                                                                                      US 1997-820360
                                                                                                                           A2 19970312
                                                                                      US 1997-978291
                                                                                                                           A2 19971125
                                                                                     US 1998-189702 A2 19971125
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B Cytotoxic T lymphocyte (CTL) responses are effectively induced to an antigen of interest, particularly viral, bacterial, parasitic and tumor antigens. Compns., including pharmaceutical compns., of CTL-inducing peptide and an adjuvant or a lipidated peptide which induces a helper T cell (HTL) response stimulate the antigen specific CTL response. Among the viral antigens to which the CTL responses are effectively induced in humans are those of hepatitis B. The CTL response may be optimized by a regimen of two or more booster administrations. Cocktails of two or more CTL inducing

peptides are employed to optimize epitope and/or MHC class I restricted coverage.

REFERENCE COUNT: THERE ARE 84 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 10 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:184919 CAPLUS

DOCUMENT NUMBER: 136:246374

TITLE: Antigen peptides having B7-like

KIND DATE

supermotif for preventing, treating and diagnosing

diseases such as viral infection and cancers INVENTOR(S): Sette, Alessandro; Sidney, John; Southwood, Scott

PATENT ASSIGNEE(S): Epimmune Inc., USA

SOURCE: PCT Int. Appl., 39 pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE . English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION: PATENT NO.

		2002				A1		2002	0314								0000	901
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
			CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,
			HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,
			LU.	LV.	MA.	MD.	MG.	MK,	MN.	MW.	MX.	MZ.	NO.	NZ.	PL.	PT.	RO.	RU.
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			DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	BJ,
			CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG			
	CA	2421	445			A1		2002	0314		CA 2	000-	2421	445		2	0000	901
	ΑU	2000	0733	96		A5		2002	0322		AU 2	000-	7339	6		2	0000	901
	ΕP	1320	377			A1		2003	0625		EP 2	000-	9614	44		2	0000	901
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
			IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL							
	JΡ	2004	5224	15		T		2004	0729		JP 2	002-	5245	18		2	0000	901
PRIOR	IT	Y APP	LN.	INFO	. :						WO 2	000-	US23	913		W 2	0000	901
AB	The	pre	sent	inv	enti	on p	rovi	des	pept.	ide	comp	ns.	capa	ble	of			
	bi	nding	alv	copr	otei	ns e	ncod	led b	v HL	A-A,	HLA	-B,	and .	HLA-	C al	lele	s an	d
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APPLICATION NO.

DATE

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L50 ANSWER 11 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
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ACCESSION NUMBER: 2001:124651 CAPLUS

DOCUMENT NUMBER: 135:209508

TITLE: Diagnostic potential of an enzyme immunoassay system for evaluation of the spectrum of antibodies to

hepatitis C structural and nonstructural antigens AUTHOR(S): Pimenov, V. K.; Afanas'ev, A. Yu.; Kolobov, A. A.; Zubov, S. V.; Dobrotina, N. A.; Novikov, V. V.

CORPORATE SOURCE: Nizhegorod. Gos. Univ. im. N. I. Lobachevskogo, Nizhniy Novgorod, Russia

SOURCE . Voprosy Virusologii (2000), 45(6), 44-47 CODEN: VVIRAT; ISSN: 0507-4088

PUBLISHER: Meditsina DOCUMENT TYPE: Journal LANGUAGE: Russian

A new enzyme immunoassay EIA-HCV-Spectra test system constructed on the base of recombinant proteins and synthetic peptides allows sep.

detection of antibodies to E1/E2, core, NS3, NS4, and

NS5 antigens of hepatitis C virus (HCV). The system is highly specific and more sensitive than the test systems used in screening

studies, which allows its use as a final test for antiHCV antibodies. Antibodies to various HCV antigens were analyzed using this test system in patients with acute and chronic hepatitis C and asymptomatic donors with antiHCV. In acute hepatitis C during the first-second week

after clin. attis C and asymptomatic donors with antiHCV. In acute hepatitis C during the first and second week after clin. manifestation, antibodies to nonstructural virus proteins are detected 3-4 times less often than in chronic hepatitis C. Acute hepatitis C is characterized by the presence of antibodies only to core antigen (66%). In

chronic condition combinations of antibodies to structural and nonstructural HCV antigens predominate: core + NS4,

core + NS3 + NS4, core + NS3 + NS5 , core + NS4 + NS5, and core + NS3 +

NS4 + NS5. In asymptomatic donors with antiHCV and in

patients with chronic hepatitis C the spectra of antibodies were similar in 45.7% cases.

L50 ANSWER 12 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:577492 CAPLUS

DOCUMENT NUMBER: 133:134178

TITLE: Monoclonal antibodies against hepatitis C virus

nonstructural protein 4 and hybridomas

INVENTOR(S): Li, Defu; Yin, Hongzhang; Li, Xiuhua; Meng, Shuhua;

Liu, Ying; Zhang, Ning PATENT ASSIGNEE(S):

China Medicine & Biological Product Inspection Center, Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 24 pp. CODEN: CNXXEV

Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

DOCUMENT TYPE:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1230591	A	19991006	CN 1998-117114	19980731
CN 1089802	В	20020828		
RIORITY APPLN. INFO.:			CN 1998-117114	19980731
B Anti-HCV core antiq	an ant	i-HCV envelo	ne antigen	

AB Anti-HCV core antigen, anti-HCV envelope antigen, anti-HCV NS3 protein, anti-HCV NS4 protein, and

anti-HCV NS5 protein monoclonal antibodies are raised by

immunizing Balb/c mice with resp. antigenic peptide. Five hybridoma cell lines capable of producing the monoclonal antibodies

specific for HCV core antigen, envelope antigen,

NS3 protein, NS4 protein, and NS5 protein are

prepared by conventional hybridoma technol. The five monoclonal antibodies were purified, labeled with horse radish peroxidase, are used for detection of HCV antigen in blood products for transfusion and

diagnosis and treatment of HCV infection.

L50 ANSWER 13 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2000:79709 CAPLUS

DOCUMENT NUMBER: 133:41773

TITLE: Assessment of diagnostic significance in the clinical

use of third generation of recombinant immuno-Blot

assav (RIBAIII)

Suyama, Yoji; Iwata, Yoshimori; Mishima, Seiji; AUTHOR(S): Ishikura, Hiroto; Shibata, Hiroshi; Masuda, Junichi

Division of Blood Transfusion, Shimane Medical CORPORATE SOURCE: University, Japan

SOURCE: Igaku to Yakugaku (1999), 42(5), 829-836

CODEN: IGYAEI: ISSN: 0389-3898

PUBLISHER: Shizen Kagakusha

DOCUMENT TYPE: Journal LANGUAGE: Japanese

We examined the diagnostic significance of third generation of Recombinant Immuno-Blot Assay (RIBAIII) in comparison with RIBAII using 80 HCV

antibody pos. samples determined by second generation screening kit. RIBAIII uses synthetic peptides from the NS4 region (c100p)

and the putative nucleocapsid (c22p) region as the antigenic epitopes instead of the use of recombinant antigens in RIBAII.

Recombinant antigen of NS5 region is newly added in

RIBAIII. Therefore, RIBAIII can be expected to increase the sensitivity as the diagnostic character and, in fact, we confirmed the actual increase of pos. rate and decrease of indeterminate or neg. ate as compared with RIBAII. Simultaneous detection of HCV-RNA by "AMPLICOR HCV" supported the high specificity of the results of RIBAIII. The sequential assay of the patient with acute HCV-hepatitis after needle-stick injury revealed the clin. importance of the reactivity with NS3 in terms of the early detection of HCV infection. Thus, our results indicate that RIBAIII is useful assay kit presenting highly sensitive and specific characters as

L50 ANSWER 14 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:53495 CAPLUS

the confirmation test of HCV infection.

DOCUMENT NUMBER: 133:16047

TITLE: Hepatitis C epitopes from phage-displayed cDNA libraries and improved diagnosis with a chimeric

AUTHOR(S): Pereboeva, Larisa A.; Pereboev, Alexander V.; Wang,

Lin Fa; Morris, Glenn E.

CORPORATE SOURCE: MRIC Biochemistry Group, N. E. Wales Institute,

Wrexham, LL11 2AW, UK

SOURCE: Journal of Medical Virology (2000), 60(2), 144-151

CODEN: JMVIDB: ISSN: 0146-6615

PUBLISHER: Wiley-Liss, Inc.

DOCUMENT TYPE: Journal LANGUAGE: English

A novel method for cloning DNase I fragments into bacteriophage display vector fUSE2 was used to create libraries expressing hepatitis C virus (HCV) protein fragments on the phage surface. Selection by panning with a mixture of sera from five HCV-seropos. individuals enabled identification of antigenic determinants in NS3 (amino acids 1,383-1,415),

NS4 (amino acids 1,930-1,938), and NS5 (amino acids 2,088-2,104). The NS3 result is the most accurate location to date of a major conformational determinant that cannot be mimicked by short peptides. Any expressed sequence from the phage library can be excised with Bgl II and cloned directly into the Bgl II site of an appropriate plasmid for bacterial expression. This enables production of chimeric proteins containing multiple antigenic determinants, illustrated by co-expression of the NS4P (amino acids 1,930-1,938) epitope with an NS4N fragment (amino acids 1,644-1,812) containing at least three linear HCV epitopes. When used to screen 35 individual HCV-pos. sera by ELISA, the

chimeric antigen detected eight more positives than NS4N alone and gave increased immunoreactivity with others. This approach of identifying antigenic regions by phage display and then co-expressing them as chimeric proteins may be generally applicable to the production of improved diagnostic antigens and recombinant vaccines.

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 15 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:709003 CAPLUS

DOCUMENT NUMBER: 131:321538

TITLE: Immobilized antigen or antibody-containing device for

immunodiagnosis

INVENTOR(S): Chowdhury, Mohammed Afzal; Childs, Mary Ann; Bernstein, David; Lovchik, Janece; Trainor, William

PATENT ASSIGNEE(S): Universal Healthwatch, Inc., USA

SOURCE: PCT Int. Appl., 62 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent. LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION: D3.00010 110

PATENT	NO.			KIN	D	DATE			APPL	ICAT	ION I	NO.		D	ATE		
					_												
WO 995	6128			A1		1999	1104		WO 1	999-	US93:	31		1	9990	430	
W:	ΑE,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	
	DE,	DK,	EE,	ES,	FI,	GB,	GD,	GE,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	
	KP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	
	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ΤJ,	TM,	TR,	TT,	
	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM
RW	: GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,	DK,	
	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	
	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG						
AU 993	6709			A		1999	1116		AU 1	999-	3670	9		1	9990	430	
PRIORITY AP	PLN.	INFO	. :						US 1	998-	6993	5		A2 1	9980	430	

WO 1999-US9331 W 19990430 A diagnostic test device contains a filter and at least two peptides that correspond to the same analyte epitope, the test device exhibits improved transfer of fluid movement between assay components and is useful for the simultaneous assay of multiple analytes. The filter is an integral part of a strip and can be used for strip-testing of whole blood and other particulate-containing solns. generally. Surfaces of parts within the device are combined in particular ways to improve sample and reagent fluid movement and an optional chemical additive increase test quality. The immobilized peptides are selected from HIV envelope protein, HCV envelope protein, HCV NS3 protein, HCV NS4 protein, HCV NS5 protein, 15.5 kDa syphilis protein, 17 kDa syphilis protein, 44.5 kDa syphilis protein, and 47 kDa syphilis protein. Whole blood HIV tests are exemplified, including confirmatory tests, that are easy to carry out, show improved chemical resistance to false pos. results and

greater ability to detect a wide variety of viral strains. THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 5 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 16 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1999:699610 CAPLUS

DOCUMENT NUMBER: 132:136150

TITLE: Antigenic properties of synthetic peptides

representing the main determinants of structural and nonstructural proteins of hepatitis C virus

AUTHOR(S): Primenov, V. K.; Zubov, S. V.; Kolobov, A. A.;

Alekseenkova, T. I.; Firsova, T. V.; Semiletov, Yu A.; Afanas'ev, A. Yu.; Dobrotina, N. A.; Novikov, V. V.

CORPORATE SOURCE: Nizhegorodskii Gos. Univ. im. N. I. Lobachevskogo,

Nizhniy Novgorod, Russia

SOURCE: Biotekhnologiya (1998), (3), 76-81

CODEN: BTKNEZ; ISSN: 0234-2758 Biotekhnologicheskaya Akademiya RF

PUBLISHER: Biotekhn DOCUMENT TYPE: Journal

DOCUMENT TYPE: Journal LANGUAGE: Russian

AB The authors studied the antigenic properties of synthetic peptides representing the main conservative determinants of core, NS3,

NS4, and NS5 proteins of hepatitis C virus. The samples of blood sera from patients with hepatitis C were used. Apparently, the

or blood sera from patients with negatitist Were used. Apparently, the synthetic peptides consisting of >70 amino acid residues or combinations of peptides most completely reflected the antigenic properties of viral proteins. The authors selected the optimal antigenic compos. for the construction of screening and confirmatory test-kits for diagnosis of hepatitis C virus infection.

nepacitis C virus infection.

L50 ANSWER 17 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:671376 CAPLUS

DOCUMENT NUMBER: 132:164892

TITLE: Conserved hepatitis C virus sequences are highly

immunogenic for CD4+ T cells: implications for vaccine

development

AUTHOR(S): Lamonaca, Vincenzo; Missale, Gabriele; Urbani, Simona; Pilli, Massimo; Boni, Carolina; Mori, Cristina; Sette,

Alessandro; Massari, Marco; Southwood, Scott; Bertoni,

Roberto; Valli, Antonietta; Fiaccadori, Franco;

Ferrari, Carlo

CORPORATE SOURCE: Laboratorio di Immunopatologia Virale, Divisione
Malattie Infettive, Azienda Ospedaliera di Parma, and

Cattedra di Malattie Infective, Universita di Parma,

Italv

SOURCE: Hepatology (Philadelphia) (1999), 30(4), 1088-1098

CODEN: HPTLD9; ISSN: 0270-9139

PUBLISHER: W. B. Saunders Co.
DOCUMENT TYPE: Journal

DOCUMENT TYPE: Journal LANGUAGE: English

AB The HLA class II-restricted T-cell response to hepatitis C virus (HCV) antigens is believed to influence the final outcome of hepatitis

C, because it is vigorous in patients who recover from acute hepatitis C, but it is weak in those who develop a chronic infection. For this reason, exogenous stimulation of T-cell responses in chronic HCV infection may represent a strategy to cure patients with chronic hepatitis C by

approximating the vigor of their T-cell reactivity to that of patients who succeed in recovering from hepatitis. It may also be a preventies approach to avoid spread of the virus by facilitating the development of a

vigorous protective response at the very early stages of infection. T-cell-based vaccines composed of immunodominant, promiscuous, and conserved T-cell epitopes may represent a powerful tool to achieve optimal

stimulation of the T-cell reactivity. To identify HLA class II-restricted T-cell epitopes useful for this purpose, 22 subjects with acute HCV infection were studied and followed for an average time of 29 mo. Eight of

them recovered from hepatitis, and 14 developed a chronic infection. Overlapping 20-mer peptides covering the entire core and

NS4 antigens and a panel of peptides representing highly conserved regions of core, NS3, NS4

, and NS5 were used. By direct peripheral blood T-cell

stimulation and by fine-specificity anal. of HCV-specific T-cell lines and

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clones, highly immunogenic T-cell epitopes were identified within core,
NS3, and NS4. All these epitopes are immunodominant and
highly conserved among the known HCV isolates. Moreover, they are
promiscuous, because they can be presented to T cells by different HLA
class II mols. Immunodominance, sequence conservation, and promiscuity
make these epitopes ideal components of preventive or therapeutic
T-cell-based vaccines against HCV.
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REFERENCE COUNT: THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 18 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:298250 CAPLUS

DOCUMENT NUMBER: 131:127333

TITLE: Use of a novel hepatitis C virus (HCV) major-epitope chimeric polypeptide for diagnosis of HCV infection AUTHOR(S): Chien, David Y.; Arcangel, Phillip; Medina-Selby,

Angelica; Coit, Doris; Baumeister, Mark; Nguyen, Steve; George-Nascimento, Carlos; Gyenes, Alexander; Kuo, George; Valenzuela, Pablo

CORPORATE SOURCE:

Chiron Corporation, Emeryville, CA, 94507, USA Journal of Clinical Microbiology (1999), 37(5), SOURCE: 1393-1397

CODEN: JCMIDW; ISSN: 0095-1137 PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English The genome of hepatitis C virus (HCV) consists of seven functional

regions: the core, E1, E2/NS1, NS2, NS3, NS4, and NS5 regions. The U.S. Food and Drug Administration-licensed 2.0G

immunoassay for the detection of anti-HCV uses proteins from the core, NS3, and NS4 regions. The 3.0G ELISA includes the

protein from the NS5 region. The necessity of detecting

antibodies to viral envelope proteins (E1 and E2) and to different genotype samples has been demonstrated previously. In this study we have attempted to improve the sensitivity of the anti-HCV assay by developing a single multiple-epitope fusion antigen (MEFA; MEFA-6) which

incorporates all of the major immunodominant epitopes from the seven functional regions of the HCV genome. A nucleic acid sequence consisting

of proteins from the viral core, E1, E2, NS3, NS4, and

NS5 regions and different subtype-specific regions of the NS4 region was constructed, cloned, and expressed in yeast. The

epitopes present on this antigen can be detected by

epitope-specific monoclonal and polyclonal antibodies. In a competition assay, the MEFA-6 protein competed with 83 to 96% of genotype-specific

antibodies from HCV genotype-specific peptides. This recombinant antigen was subsequently used to design an anti-HCV chemiluminescent immunoassay. We designed our assay using a monoclonal

anti-human IgG antibody bound to the solid phase. Because MEFA-6 is fused with human superoxide dismutase (h-SOD), we used an anti-human superoxide dismutase, di-Me acridinium ester-labeled monoclonal antibody for detection. Our results indicate that MEFA-6 exposes all of the major immunogenic epitopes. Its excellent sensitivity and specificity for the

detection of clin. seroconversion are demonstrated by this assay. THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 17 RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 19 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:12144 CAPLUS DOCUMENT NUMBER: 130:221851

TITLE: Clonality and specificity of cryoglobulins associated with HCV: pathophysiological implications

AUTHOR(S): Mondelli, Mario U.; Zorzoli, Irene; Cerino, Antonella; Cividini, Agostino; Bissolati, Morena; Segagni, Laura;

Perfetti, Vittorio; Anesi, Ernesto; Garini, Pietro; Merlini, Giampaolo

CORPORATE SOURCE: Laboratori di Ricerca-Area Infettivologica, Istituto

di Clinica delle, IRCCS Policlinico San Matteo and University of Pavia, Pavia, 27100, Italy

SOURCE: Journal of Hepatology (1998), 29(6), 879-886 CODEN: JOHEEC; ISSN: 0168-8278

PUBLISHER: Munksgaard International Publishers Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English Background/Aims: Hepatitis C virus (HCV) infection plays a central role in

the pathogenesis of mixed cryoglobulinemia through mol. mechanisms which remain to be elucidated. The aim of this study was to investigate the role of antibody responses to HCV in the pathogenesis of cryoglobulinemia through characterization of the anti-HCV specificity and immunochem. characteristics of the Igs involved in cryopptn. Methods: Sera from 50 consecutive patients with chronic HCV infection (RNA pos.) were screened for the presence of cryoglobulins. The two major components of cryoppts., IgM rheumatoid factors and IgG, were separated by high performance liquid chromatog, and analyzed for immunochem, composition by immunoblotting and antibody specificity by ELISA and immunoblotting using recombinant HCV proteins and synthetic peptides as antigens. Results: Cryoppts. were observed in 27 patients and characterized by immunofixation: 13 (48%) were classified as type II and 14 (52%) as type III. Monoclonal Igs were detected by immunoblotting in 20 cryoppts.: IgM in 14 samples and IgG in 14, with a clear preponderance of IgG3 (12/14). Specificity studies on sera and purified IgM and IgG fractions from cryoppts, revealed enrichment in cryoglobulins, predominantly polyclonal IgG1, reactive with the HCV structural proteins, whereas specificities for nonstructural viral proteins were relatively less represented compared to whole serum. No restricted pattern of fine specificity was observed IgG3 subclass was apparently not involved in HCV nucleoprotein binding. Conclusions: these findings do not support a direct link between monoclonal cryoglobulins and immune response to HCV. According to the proposed pathogenetic model, HCV

through several cooperative mechanisms. REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

infection can induce the formation of cryoprecipitable rheumatoid factors, sustain their production, and eventually lead to monoclonal B-cell expansion

L50 ANSWER 20 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:286360 CAPLUS DOCUMENT NUMBER: 126:263158 ORIGINAL REFERENCE NO.: 126:50973a,50976a

TITLE:

Spliced peptides for the diagnosis and detection of

hepatitis C virus (HCV) infection Hosein, Barbara; Wang, Chang Yi

INVENTOR(S): PATENT ASSIGNEE(S): United Biomedical, Inc., USA SOURCE:

Ger. Offen., 71 pp. CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19549390 DE 19549390	A1 C2	19970320 19971023	DE 1995-19549390	19951027

US 5736321	A	19980407	US	1995-530550		19950919
DE 19540105	C1	19970220	DE	1995-19540105		19951027
IN 2001CA00403	A	20050311	IN	2001-CA403		20010724
PRIORITY APPLN. INFO.:			US	1995-530550	A	19950919
			DE	1995-19540105	A3	19951027
			US	1994-333573	B2	19941101
			IN	1995-CA1358	A3	19951031

AB Novel peptides are disclosed which are specific for the diagnosis of hepatitis C virus (HCV) infection, as are compose containing mixts. of these peptides. The peptides have at least one antigenic region which is effective in the detection of HCV-associated antibodies using a immunoassay. A novel spliced peptide is disclosed which can be used to block the non-specific reactivity of particular NS-3 conformational epitopes. The fused peptide composition includes (1) a linear fused peptide in which the C-terminus is a -COOH or -CONH2 group, (2) one or more of several disclosed peptide sequences, and (3) an amino acid sequence corresponding to the NS-3 region of HCV. Thus, different mixts. of peptides were used detect antibodies in a panel of human sera. Mixts. A and B and D and E showed comparable sensitivity on the whole, but with samples containing core protein 2 and 3, the D and E mixts. showed higher sensitivity than the A and B mixts.

L50 ANSWER 21 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:483107 CAPLUS

TITLE: Different clinical behaviors of acute hepatitis C virus infection are associated with different vigor of

the anti-viral cell-mediated immune response

AUTHOR(S): Missale, Gabriele; Bertoni, Roberto; Lamonaca,
Vincenzo; Valli, Antonietta; Massari, Marco; Mori,

Cristina; Rumi, Maria Grazia; Houghton, Michael; Fiaccadori, Franco; Ferrari, Carlo

CORPORATE SOURCE: Cattedra Malattie Infettive, Univ. Parma, Parma, CA,

43100, USA

SOURCE: Journal of Clinical Investigation (1996), 98(3),

706-714

CODEN: JCINAO; ISSN: 0021-9738
PUBLISHER: Rockefeller University Press

DOCUMENT TYPE: Journal LANGUAGE: English

AB The anti-viral T cell response is believed to play a central role in the pathogenesis of hepatitis C virus infection. Since chronic evolution occurs in >50% of HCV infections, the sequential anal. of the T cell response from the early clin. stages of disease may contribute to define the features of the T cell response associated with recovery or chronic viral persistence. For this purpose, 21 subjects with acute hepatitis C virus infection were sequentially followed for an average time of 44 wk. Twelve patients normalized transaminase values that remained normal throughout the follow-up period; all but two cleared hepatitis C virus-RNA from serum. The remaining nine patients showed persistent viremia and elevated

transaminases. Anal. of the peripheral blood T cell proliferative response to core, E1, E1, NS3, NS4, and NS5

recombinant antigens and synthetic peptides showed

that responses to all hepatitis C virus antigens, except EI, were significantly more vigorous and more frequently detectable in patients who normalized transaminase levels than in those who did not. By sequential evaluation of the T cell response, a difference between the two groups of patients was already detectable at the very early stages of acute infection and them maintained thrompout the followup neriod. The

acute infection and then maintained throughout the followup period. The results suggest that the vigor of the T cell response during the early stages of infection may be a critical determinant of disease resolution and control of infection.

L50 ANSWER 22 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:304303 CAPLUS DOCUMENT NUMBER: 124:340908

ORIGINAL REFERENCE NO.: 124:63325a,63328a

TITLE: Antigenic peptides derived from hepatitis C virus for use in diagnosis, treatment, and prophylaxis of

infection

INVENTOR(S): Wang, Chang Yi; Hosein, Barbara H.
PATENT ASSIGNEE(S): United Biomedical, Inc., USA

SOURCE: Ger. Offen., 61 pp.

CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PA	TENT	NO.			KINI)	DATE		P	APP	LICAT	ION	NO.		D.	ATE	
	1950				A1			0502	-	DΕ	1995-	1950	0394		1	9950	109
	1950				C2		1996										
GB	2294				A		1996		0	βB	1994-	2560	4		1	9941:	219
GB	2294						1998										
NL	9402	224			A		1996	0603	N.	1L	1994-	2224			1	9941:	228
NL	1949	71			С		2003	0321									
WO	9613	616			A1		1996	0509	V	O	1995-1	JS13	660		1	9951	023
	W:	AL,	AM,	AU,	BB,	BG,	BR,	BY,	CA,	CN	, CZ,	EE,	FI,	GE,	HU,	IS,	JP,
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		NO,	NZ,	PL,	RO,	RU,	SD,	SG,	SI,	SK	, TJ,	TM,	TT,	UA,	UG,	UZ,	VN
	RW:	KE,	LS,	MW.	SD,	SZ,	UG,	AT,	BE,	CH	, DE,	DK,	ES,	FR.	GB,	GR,	IE,
		IT,	LU,	MC,	NL,	PT,	SE,	BF.	BJ,	CF	, CG,	CI,	CM,	GA,	GN.	ML,	MR,
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JP	3199	995			B2		2001	0820									
JP	1110	0397			A		1999	0413	J	JΡ	1998-	2120	80		1	9951	101
IN	2001	CA00	403		A		2005	0311	1	ΙN	2001-0	CA40	3		2	0010	724
PRIORIT	Y APP	LN.	INFO	. :					τ	JS	1994-	3335	73	- 1	A 1	9941	101
									V	O	1995-	JS13	660			9951	
											1995-					9951	
									ċ	JΡ	1995-	2850	20	- 1	A3 1	9951	101

AB Synthetic linear and branched antigenic peptides derived from proteins of hepatitis C virus are described for use in the diagnosis, treatment, and prophylaxis of viral infection. These peptides are derived from variable regions of viral proteins and peptide families encompassing variant sequences are also described. The preparation and use of a number of such peptides in immunoassavs is demonstrated.

L50 ANSWER 23 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1996:191971 CAPLUS

DOCUMENT NUMBER: 1996:19197

ORIGINAL REFERENCE NO.: 124:42637a, 42640a

TITLE: Process for determining specific immunoglobulins using

multiple antigens
INVENTOR(S): Wienhues-Thelen, Ursula-Henrike; Faatz, Elke;

Kruse-Mueller, Cornelia; Ofenloch-Haehnle, Beatus; Hoess, Eva; Seidel, Christoph; Wiedmann, Michael

PATENT ASSIGNEE(S): Boehringer Mannheim GmbH, Germany

SOURCE: Ger. Offen., 30 pp.
CODEN: GWXXBX

DOCUMENT TYPE: Patent

German

LANGUAGE: Ge:
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PA:	TENT NO.			KIND		DATE	
DE	4430972			A1		19960201	DE 1994-4430972 1994083: DE 1994-4430973 1994083: DE 1994-4430998 1994083: DE 1994-4433945 1994110. DE 1994-4439346 1994110. CA 1995-2172144 1995072. CA 1995-2172145 1995072. CA 1995-2195762 1995072. CA 1995-2195762 1995072. CA 1995-2195762 1995072. WO 1995-2195751 1995072.
DE	4430973			A1		19960201	DE 1994-4430973 1994083
DE	4430998			A1		19960201	DE 1994-4430998 1994083
DE	4439345			A1		19960201	DE 1994-4439345 1994110
DE	4439346			A1		19960201	DE 1994-4439346 1994110
DE	4439347			A1		19960201	DE 1994-4439347 1994110
CA	2172144			A1		19960208	CA 1995-2172144 1995072
CA	2172144			C		20010206	
CA	2172145			A1		19960208	CA 1995-2172145 1995072 CA 1995-2195648 1995072 CA 1995-2195752 1995072
CA	2195648			AI		19960208	CA 1995-2195648 1995072
CA	2195752			A1		19960208	CA 1995-2195/52 19950/2
WA	2195/55			A1		19960208	CA 1995-2195753 1995072 WO 1995-EP2915 1995072
WO	M. 111	CA	CN	E.I.	.TD	KR, NO,	NO 1993-EF2913 1993072
	RW. AT	BE.	CH,	DE.	DK,	ES FR	GB, GR, IE, IT, LU, MC, NL, PT, SI
WO	9603651	22,	0117	A1			WO 1995-EP2916 1995072
		CA.	CN.			KR, NO,	
							GB, GR, IE, IT, LU, MC, NL, PT, SI
WO	9603652						WO 1995-EP2919 1995072
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	RW: AT,	BE,	CH,				GB, GR, IE, IT, LU, MC, NL, PT, SI
WO	9603409						WO 1995-EP2920 1995072
						KR, NO,	
		BE,	CH,				GB, GR, IE, IT, LU, MC, NL, PT, SI
WO	9603423						WO 1995-EP2921 1995072
						KR, NO,	
							GB, GR, IE, IT, LU, MC, NL, PT, SI
WO	9603410	TD	TIC	AI		19960208	WO 1995-EP2923 1995072
	DM. DT	BF,	CH	DE	DK	ES ED	MO 1995-EF2923 1995072: GB, GR, IE, IT, LU, MC, NL, PT, SI AU 1995-31649 1995072: AU 1995-32204 1995072: AU 1995-32205 1995072: AU 1995-32206 1995072: EP 1995-928451 1995072: GB, GR, IE, IT, LI, LU, NL, PT, SI
AH	9531649	,	011,	A A	D1.,	19960222	AU 1995-31649 1995072
AU	682278			B2		19970925	
AU	9531650			A		19960222	AU 1995-31650 1995072
AU	689626			B2		19980402	
ΑU	9532204			A		19960222	AU 1995-32204 1995072
AU	688953			B2		19980319	
AU	9532205			A		19960222	AU 1995-32205 1995072
AU	690315			B2		19980423	
AU	9532206			A.		19960222	AU 1995-32206 1995072
AU	684992			B2		19980108	
EP	720614			A1		19960710	EP 1995-928451 1995072
EP	720614	DE	OII	BI	DIZ	20000524	OD OD TE TE IT III NI DE O
ED	722EE1	DE,	CH,	DE,	DK,	10060731	GB, GR, IE, IT, LI, LU, NL, PT, SI EP 1995-928452 1995072
ED	723551 723551			B1		20020306	EF 1993-920432 1993072
	723331						GB, IE, IT, LI, NL, SE
CN	1130910	22,	011,	A.	D1.,	19960911	CN 1995-190675 1995072
JP	08509995			Т		19961022	JP 1996-505470 1995072
JP	2771900			В2		19980702	
CN	1134154			A		19961023	CN 1995-190794 1995072
CN	1046531			В		19991117	
JP	09500915			T		19970128	JP 1995-505471 1995072
JP	2921989			B2		19990719	GB, IE, IT, LI, NL, SE CN 1995-190675 JP 1996-505470 CN 1995-190794 JP 1995-505471 EP 1995-926976 1995072: 1995072: 1995072: 1995072: 1995072:
EP	772616			A1		19970514	EP 1995-926976 1995072
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	D. 37	DE	CII	DE	DK EC ED	CD C	D IE IT II	T 11	MI DT CE
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CV.	1152923	DE,	CII,	A.	19970625		1995-194207	32	19950724
	1075817			В	20011205	CIV	1993-194207		19930724
	1157655			A	19970820	CN	1995-195022		19950724
	09508473			T	19970826		1996-503549		19950724
	3604147			B2	20041222	01	1550 505545		15550724
	1161745			A	19971008	CN	1995-194321		19950724
	1114106			В	20030709				
	10503485			T	19980331	JP	1996-505472		19950724
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	10504539			T	19980506	JP	1996-505469		19950724
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	187732			T	20000115	AT	1995-926976		19950724
ES	2143059			Т3	20000501	ES	1995-926976		19950724
AT	193294			T	20000615	AT	1995-928451		19950724
ES	2148540			Т3	20001016	ES	1995-928451		19950724
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AT	261122			T	20040315	AT	1995-927713		19950724
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AT	331952			T	20060715	AT	1995-928450		19950724
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		BE,	CH,				E, IT, LI, NL,	SE	
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	9601161			A	19960321		1996-1161		19960321
	9601162			A	19960321	NO	1996-1162		19960321
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	9601349			A	19960325		1996-1349		19960325
	9601350			A	19960325		1996-1350		19960325
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	5958783			A	19990928		1996-615278		19960620
	9700130			A	19970110		1997-130		19970110
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	5981286			A	19991109		1997-765452		19970116
	9700292			A	19970313		1997-292		19970123
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	6531572			A B1	20030311		1997-776189		19970124
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	6780967			B1	20030902		1999-453174		19991202
	20010021	503		A1	20010913		2001-801157		20010307
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	7390624	1/0		B2	20040226	05	2003-30004/		20030210
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	20030074			AI	20030407				A1 19940725
	Y APPIN								
TVIOUII	Y APPLN.	TNEO	. :				1994-4426276		
TRIORII	Y APPLN.	INFO	.:			DE	1994-4430972		A 19940831
TATORII	Y APPLN.	INFO	.:			DE DE		1	

DE	1994-4439345	Α	19941104
DE	1994-4439346	A	19941104
DE	1994-4439347	A	19941104
EP	1995-928450	A3	19950724
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WO	1995-EP2916	W	19950724
WO	1995-EP2919	W	19950724
WO	1995-EP2920	W	19950724
WO	1995-EP2921	W	19950724
WO	1995-EP2923	W	19950724
US	1997-776188	A3	19970124
US	1997-776189	В3	19970124
US	1997-776190	A3	19970124

 ${\tt AB} \quad {\tt A} \ {\tt process} \ {\tt is} \ {\tt described} \ {\tt for immunol}. \ {\tt determining specific antibodies}, \ {\tt especially those}$

against HIV and hepatitis C virus, in human serum by incubating the serum in the presence of a solid phase with two antigens specific for the antibodies which are to be determined The first antigen has at least one label, and the second antigen is (a) bound to the solid phase or (b) is present in a form in which it can bind to the solid phase. The amount of antibody is determined by measuring amount of label in the solid phase and/or

in

the liquid phase. One of the two antigens must contain multiple epitope regions which react with the antibody which is to be determined Thus, antibodies were determined which were specific for multimeric antigens from qp41 from HIV virus using this bridge test immunoassay.

L50 ANSWER 24 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:888040 CAPLUS

DOCUMENT NUMBER: 123:283629

ORIGINAL REFERENCE NO.: 123:50839a,50842a

TITLE: Compositions and methods for eliciting cytotoxic T

lymphocyte immunity

INVENTOR(S): Vitiello, Maria A.; Chesnut, Robert W.; Sette, Alessandro D.; Celis, Esteban; Grey, Howard

PATENT ASSIGNEE(S): Cytel Corp., USA

SOURCE: PCT Int. Appl., 108 pp.

CODEN: PIXXD2

KIND DATE

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 34

PATENT INFORMATION:

PATENT NO.				KIND DATE			APPLICATION NO.					DATE						
WO	9522	317			A1		1995	0824		WO 1	995-1	US21:	21		1	9950:	216	
	W:	AM,																
								KΡ,										
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		UA,																
	RW:	KE,																
					PI,	SE,	Br,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	ML,	MK,	NE,	
TIC	6419		TD,		В1		2002	0716		TC 1	001-	1074	0.4		1.	9940:	216	
	9518				A			0904								9950		
	8041				A1			1105			995-					9950:		
	8041				B1			0929		GL I	,,,,	7105	0,5		1	,,,,,,,,	510	
									GB.	GR.	TT.	LT.	LII.	NI	SE.	MC.	PT,	TE
AT	2776			,	T			1015										
US	2003	0099	634		A1		2003	0529		US 2	002-	1287	11		2	0020	422	
PRIORIT	Y APP	LN.	INFO	. :						US 1	994-	1974	84	- 1	A 1	9940:	216	

ADDITIONATION NO

DATE

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US 1991-749568 B2 19910826
US 1992-827682
                B2 19920129
US 1992-874491
                 B2 19920427
US 1992-935811
                 B2 19920826
WO 1995-US2121
                  W 19950216
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AB Cytotoxic T lymphocyte (CTL) responses are effectively induced to an antigen of interest, particularly viral, bacterial, parasitic and tumor antigens. Compns., including pharmaceutical compns., of CTL-inducing peptide and an adjuvant or a lipidated peptide which induces a helper T cell (HTL) response stimulate the antigen specific CTL response. Among the viral antigens to which the CTL responses are effectively induced in humans are those of hepatitis B (HBV). The CTL response may be optimized by a regimen of two or more booster administrations, and cocktails of two or more CTL inducing peptides are employed to optimize epitope and/or MHC class I restricted coverage. In example, HLA-A2.1-restricted CTL was induced by s.c. priming with purified HBV peptides in incomplete Freund's adjuvant, combination of CTL and T-helper epitopes were used to induce CTL, and specific CTL inducing peptides were used as vaccines for preventing and treating hepatitis C virus infection, melanoma, human

papillomavirus infection, and HIV infection. L50 ANSWER 25 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:829087 CAPLUS

DOCUMENT NUMBER: 124:6563

ORIGINAL REFERENCE NO.: 124:1415a,1418a

Epitope mapping of the NS4 and NS5

gene products of hepatitis C virus and the use of a

chimeric NS4-NS5 synthetic peptide

for serodiagnosis

AUTHOR(S): Rosa, C.; Osborne, S.; Garetto, F.; Griva, S.;

Rivella, A.; Calabresi, G.; Guaschino, R.; Bonelli, F. Sorin Biomedica, R and D Diagnostic Division, Strada CORPORATE SOURCE: per Crescentino, Saluggia (VC), 13040, Italy

SOURCE: Journal of Virological Methods (1995), 55(2), 219-32

CODEN: JVMEDH; ISSN: 0166-0934

PUBLISHER: Elsevier DOCUMENT TYPE: Journal LANGUAGE: English

Specific domains of the NS4 and NS5 gene products of

hepatitis C virus have been identified using hydrophilicity profiles for the prediction of potential immunogenic regions, and epitope scanning techniques. Peptides synthesized on the basis of such data show excellent reactivity in the ELISA format. Introduction of a glycine-glycine spacer between two peptides (NS4-12 and NS5-44) to give a single chimeric peptide does not appear to impair immunoreactivity. An ELISA based on the chimeric peptide and a Core-NS3 recombinant protein correctly diagnoses a cohort of hemodialyzed patients, three com. HCV panels and the sera of a neg. control population.

L50 ANSWER 26 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:723337 CAPLUS DOCUMENT NUMBER: 123:152868

ORIGINAL REFERENCE NO.: 123:27045a,27048a TITLE: Structured synthetic antigen libraries as diagnostics,

vaccines and therapeutics

INVENTOR(S): Wang, Chang Yi; Zamb, Timothy J.; Ye, John; Kaminsky, Stephen M.; Hosein, Barbara; Nixon, Douglas F.; Koff,

C. Wayne; Kowalski, Jacek; Walfield, Alan M.

PATENT ASSIGNEE(S): United Biomedical, Inc., USA

PCT Int. Appl., 216 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. ----A1 19950504 WO 1994-US12268 19941026 WO 9511998 W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ, VN RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG CA 2175579 A1 19950504 CA 1994-2175579 AU 9480916 A 19950522 AU 1994-80916 A1 19960814 EP 1994-932048 19941026 EP 725838 19941026 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE PRIORITY APPLN. INFO.: US 1993-143412 A 19931026 WO 1994-US12268 W 19941026

The present invention relates to "structured synthetic antigen libraries" (SSAL) composed of related peptides synthesized simultaneously in a single peptide synthesis. This "structured" library contrasts to those libraries previously described as "random peptide libraries" in that the order or structure within a synthetic antigen is provided by invariant amino acid residues that define the framework sequence of the synthetic antigen. The specific amino acids and their frequency of appearance at a variant locus within aligned peptide sequences is defined by the primary sequences of the several variants that make up the alignment used to construct the antigen peptide library. A method of constructing an open diagnostic, vaccine or therapeutic for a mutational infectious agent is also provided. The invention further provides the SSAL in diagnostic methods, kits, vaccination methods, vaccine compns. and pharmaceutical compns. The libraries are prepared from variable domains in proteins and provide improved vaccines, diagnostics and therapeutics for infectious agents, etc., from such proteins.

L50 ANSWER 27 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:450822 CAPLUS

DOCUMENT NUMBER: 122:237247

ORIGINAL REFERENCE NO.: 122:43315a,43318a

TITLE: Linear B-cell epitopes of the NS3-NS4-NS5 proteins of the hepatitis C

virus as modeled with synthetic peptides

Khudyakov, Yu. E.; Khudyakova, N. S.; Jue, D. L.; Lambert, S. B.; Fang, S.; Fields, H. A.

Public Health Service, U.S. Dep. Health and Human

Services, Atlanta, GA, 30333, USA SOURCE: Virology (1995), 206(1), 666-72 CODEN: VIRLAX; ISSN: 0042-6822

PUBLISHER: Academic
DOCUMENT TYPE: Journal
LANGUAGE: English

AUTHOR(S):

CORPORATE SOURCE:

AB A set of 150 synthetic peptides spanning the proteins

NS3-MS4-MS5 of the hepatitis C virus (HCV) was synthesized and tested with a panel of 20 sera obtained from HCV-infected patients. Of 62 peptides prepared from the NS3 region,

none exhibited strong antigenic reactivity. Rather, five peptides from this region demonstrated specific reactivity with only 5-10% of

anti-HCV-pos. sera. Nonetheless, it is well known that the NS3 region contains strong antigenic epitopes. These epitopes appear to be modeled in a functionally active manner with recombinant proteins and cannot be mimicked properly with short synthetic peptides. This finding suggests that the major NS3 antigenic epitopes are conformationally dependent. Seven of 20 peptides prepared from the NS4 region were immunoreactive. Five peptides from this region demonstrated very strong HCV-specific antigenic reactivity. Four of the five peptides belong to the recognized immunoreactive 5-1-1 region located inside the C100-3 antigen. One peptide demonstrating immunoreactivity with approx. 90% of anti-HCV-pos. sera was found outside the C100-3 region at the C-terminal part of the NS4 protein. Of 68 peptides synthesized from the NS5 protein, 30 were immunoreactive. Six of the 30 demonstrated immunoreactivity with 35-50% of anti-HCV-pos. sera. Thus, the NS4 and NS5 regions of the HCV polyprotein contain a large number of specific, broadly reactive, linear antigenic epitopes. The highly antigenic reactivity of the NS5 region suggests that this protein may have significant diagnostic potential.

L50 ANSWER 28 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1993:665947 CAPLUS DOCUMENT NUMBER: 119:265947

ORIGINAL REFERENCE NO.: 119:47473a, 47476a

TITLE: Antigenic polypeptides from hepatitis C virus and

their use as diagnostic agents
INVENTOR(S): Parker, David; Rodgers, Brian Colin

PATENT ASSIGNEE(S): Parker, David; Rodgers, Brian Coli

SOURCE: PCT Int. Appl., 99 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.				KIND DATE			F	DATE								
						-			-								
WO	9317	110			A2		1993	0902	V	VO 1	993-	GB34	5			1993	0219
WO	9317	110			A3		1993	1014									
	W:	AU,	CA,	CZ,	FI,	HU,	JP,	KR,	NO,	NZ,	PL,	SK,	US				
			BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL	, PT	, SE
AU	9335	096			A		1993	0913	P	AU 1	993-	3509	6			1993	0219
ZA	9301	203			A		1993	1004	2	ZA 1	993-	1203				1993	0219
PRIORIT	Y APP	LN.	INFO	. :					0	B 1	992-	3803			Ą	1992	0221
									V	VO 1	993-	GB34	5	- 1	A	1993	0219

AB Antigenic polypeptides of hepatitis C virus derived from at least three viral proteins are used in combination to increase the sensitivity of immunoassays for parenterally transmitted non-A, non-B hepatitis virus. The antigens are derived from structural and non-structural proteins. The peptides may prepared by expression of genes for the individual peptides or by expression of chimeric genes for fusion proteins. Sera were screened for reactivity to a number of hepatitis C antigens and it was found that some individuals react predominantly or exclusively with a single antigen of the virus.

L50 ANSWER 29 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1993:575422 CAPLUS

DOCUMENT NUMBER: 119:175422 ORIGINAL REFERENCE NO.: 119:31215a

TITLE: Hepatitis C virus (HCV) types 3 and 4, and nucleic acid or peptide derived therefrom for HCV typing

INVENTOR(S): Simmonds, Peter; Chan, Shui Wan; Yap, Peng Lee PATENT ASSIGNEE(S):

Common Services Agency, UK SOURCE: PCT Int. Appl., 120 pp. English

CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE: FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

			APPLICATION NO.	
	A2	19930527	WO 1992-GB2143	
W: AU, CA, FI,				
RW: AT, BE, CH,	DE, DK	, ES, FR,	GB, GR, IE, IT, LU, MC,	NL, SE
ZA 9209015	A	19930517	ZA 1992-9015 CA 1992-2123875	19921120
CA 2123875	A1	19930527	CA 1992-2123875	19921120
CA 2123875	C	20050524	AU 1992-30887	
AU 9230887	A	19930615	AU 1992-30887	19921120
AU 671967	B2	19960919		
EP 610436	A1	19940817	EP 1992-924761	19921120
R: AT, BE, CH,	DE, DK	, ES, FR,	GB, IE, IT, LI, NL, SE	
JP 07501442	T	19950216	JP 1993-509110 AT 1992-924761 ES 1992-924761 FI 1994-2369	19921120
JP 3688290	B2	20050824		
AT 231557	T	20030215	AT 1992-924761	19921120
ES 2065863	Т3	20030901	ES 1992-924761	19921120
FI 9402369	A	19940719	FI 1994-2369	19940520
FI 113967	B1	20040715	US 1994-244116	
US 5763159	A	19980609	US 1994-244116	19940715
US 20030198946	A1	20031023	US 2003-396964	20030325
US 7179470	B2	20070220		
US 20070128221	A1	20070607	US 2007-652862 GB 1991-24696	20070112
PRIORITY APPLN. INFO.:			GB 1991-24696	A 19911121
			GB 1992-13362	A 19920624
			WO 1992-GB2143	W 19921120
			US 1994-244116	A3 19940715
			US 1998-39130	B1 19980313
US 20070128221 PRIORITY APPLN. INFO.:			US 2003-396964	A1 20030325

on the information obtained by PCR of the 5' non-coding region (5'NCR) of HCV samples from various geog. locations. Nucleotide sequences of the non-coding, core, E1, E2 or NS1-5 regions of types 3 and 4 of HCV are distinctive from those of the known type 1 and 2 HCV and can be used to design DNA probes for HCV typing. Also peptides derived from the core, NS3, and NS4 or NS5 regions of these two types of HCV can be used as antigens for diagnosis of the HCV. Also shown was the typing of HCV based on the sequence variations between HCV types and thus the distinctive endonuclease cleavage patterns.

AB Hepatitis C virus types 3 and 4 are identified by phylogenetic anal, based

L50 ANSWER 30 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1992:529836 CAPLUS

DOCUMENT NUMBER: 117:129836

ORIGINAL REFERENCE NO.: 117:22537a,22540a

TITLE: Hepatitis C antibody assay utilizing recombinant antigens

Devare, Sushil G.; Desai, Suresh M.; Casey, James M.; INVENTOR(S): Dawson, George J.; Lesniewski, Richard R.; Dailey, Stephen H.; Gutierrez, Robin A.; Stewart, James

Lawrence

SOURCE:

PATENT ASSIGNEE(S): Abbott Laboratories, USA Eur. Pat. Appl., 115 pp. CODEN: EPXXDW

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 4 PATENT INFORMATION:

KIND DATE APPLICATION NO. DATE PATENT NO. ---------EP 472207 A2 19920226 EP 1991-114161 19910823 EP 472207 A3 19920826 EP 472207 B1 19991013 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE CA 2049679 C 19920225 CA 1991-2049679 CA 2049679 A1 19920225 19910822 CA 2049679 A1 19920225
AU 9182774 A 19920507 AU 1991-82774
AU 655592 B2 19950105 AT 1991-114161
ES 2139571 T3 20000216 ES 1991-114161
JP 04281792 A 19921007 JP 1991-240587
JP 3354579 B2 20021209
US 6172189 B1 20010109 US 1997-867611
US 693083 B1 20030715 US 200-690359
PRIORITY APPLN. INFO:: US 1990-572822 19910823 19910823 19910823 19910826 US 1997-867611 19970602 US 2000-690359 20001071 US 1990-572822 A 19900824 US 1990-614069 B 19910821 US 1991-748561 B2 19910821 US 1991-748566 B2 19910821 US 1991-748566 B2 19910821 US 1992-989843 B1 1992119 US 1992-989843 B1 1992119 US 1994-1178996 B1 19940110 US 1994-646757 B1 1996070 US 1997-867611 A3 19970802 19970602

AB Immunoassays for detecting antibodies to antigens of hepatitis C virus (HCV) in a fluid sample are disclosed which use recombinant antigens. The antigens are fusion products with CMP-KDO synthetase (CKS) and are produced in Escherichia coli. The cloning vector pJ0200 was used to fuse DNA encoding the recombinant proteins to DNA for CKS. Plasmid pHCV-34, encoding CKS-HCV core antigen (amino acids 1-150) fusion product, was prepared and expressed in E. coli. A screening immunoassay using this recombinant CKS-core fusion product and fusion protein CKS-33-BCD (prepared from plasmid pHCV-31; containing amino acid sequences from HCV NS3 and NS4 proteins) was sufficiently sensitive to detect seroconversion during the acute phase of HCV infection in chimpanzees. No preinoculation specimens were reactive.